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Patrick D. F. Ion* (pion@umich.edu) and **Olaf Teschke**. *Continuing toward a Global Digital Mathematics Library.*

In 2006 International Mathematical Union endorsed the notion of a global digital mathematics library (GDML), and after a 2012 US National Research Council report, the GDML WG was set up at ICM 2014. There are difficulties mobilizing the mathematical community for worthwhile infrastructure building when times are both perilous and well off, depending on where you stand. An IMKT (International Mathematical Knowledge Trust) has been founded in Waterloo ON, Canada. Specific initiatives are commencing: 1. Special Function Concordance. 2. FABSTRACTS 3. Formal Harmonization 4. Bibliographic and text analysis.

The presentation describes what we have and then concentrates on traditional GDML concerns, especially desirable content aggregation. What must a GDML include? How big is our literature? What progress is there in digitization, both in quality and quantity? Where are digital math collections today, whether records of print, newer document types or software and data? What are copyright and other restrictions on our mathematical legacy?

The GDML will create a distributed framework of resources. While some connected information exists already, a lot of work remains to be done. We discuss examples, open questions, their contexts and possible answers. (Received September 25, 2017)